previous studies we found 5 injuries to be potentially life-threatening had the patient otherwise survived. All of these patients were <55 years old, had no known prior disease which could explain the injuries and were not in anticoagulant therapy. In one case, a potentially life-saving procedure, Extra-Corporal Membrane Oxygenation, was withheld because of massive haemorrhage.
Conclusion Visceral injuries are not uncommon after mech-CPR. We found lung and heart contusions to be most common. Contrary to what previous studies have described, we found that potentially life-threatening injuries can occur as a result of mech-CPR.

Conflict of interest None to declare.
Funding None to declare.

9 QUALITY INDICATORS IN THE PREHOSPITAL EMERGENCY MEDICAL SERVICE: A SCOPING REVIEW

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Background Quality indicators (QI) in the prehospital emergency medical service (EMS) have primarily focused on response-time and other time-interval targets. With implementation of the electronic prehospital patient medical record it is now possible to retrieve patient data, why there is a need to redefine the QI. The aim of the study was to identify QI developed for the EMS.
Method A scoping review was used. The inclusion criteria were defined in accordance with scoping reviews: Participants – patients in all age groups, Concept – indicators that measure performance and/or quality, Context – prehospital EMS. A search of literature was performed in September 2018 and performed in the databases: PubMed, the Cochrane Library, Embase, CINAHL and Web of Science. Two searches were conducted: 1) reviews from 2008–2018 and 2) primary literature from 2016–2018.
Results We identified 2828 articles and included 15. We retrieved 743 QI and it was possible to categorise 723 QI. There was an almost even distribution between Clinical QI n=372 (51.5%) and Non-clinical QI n=351 (48.5%). The largest sub-categories amongst Clinical QI were Trauma (20,1%), Cardiac arrest (16,1%) and Chest pain (11,8%). Within the Non-clinical QI category, the most frequent sub-categories were Time intervals (25,6%), Resources (16,5%) and Adverse events (11,4%).
Conclusion There are many prehospital quality indicators, but most are based on time intervals or the large disease specific groups. The growth in articles suggests an increasing interest in measuring quality in EMS. There is a need for validation of the existing QI.

Conflict of interest None declared.
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10 EPIDEMIOLOGY OF POPULATION MORTALITY RELATED TO FALLS IN CALIFORNIA 2000–2016: AN INCREASING CHALLENGE FOR EMS

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Background Falls mortality increases with age and the U.S. population is aging steadily. This study examined the epidemiology of mortality in California this century due to unintentional falls.
Method Deaths caused by falls were extracted from California Department of Public Health data. Yearly Californian population estimates from the California Department of Finance were used to calculate the incidence of falls mortality.
Results There were 32 276 deaths attributed to falls, out of 618,589,117 person-years. Deaths at age ≥60 years accounted for 26 669 (83%). There were 15% more deaths during winter months, compared with summer. From age 70 mortality approximately doubled every five additional years of age. The age-adjusted falls mortality rate per 1 00 000 person-years (against the 2000 U.S. Standard Population) increased over 2000–2016 from 3.0 to 4.5 in females and from 8.9 to 9.8 in males. The number of falls deaths increased by a mean 77 per year, (95% CI 72, 83, R2=0.98, p<0.0001), doubling from 1251 in 2000 to 2582 in 2016.
Conclusion It may be prudent for EMS in California to anticipate continued increases in falls mortality. If the annual number of falls-related deaths continues to climb by an average of 77 deaths per year, then California will experience more than 3000 falls deaths per year sometime between 2025 and 2030. Recent increases were partly driven by a combination of increasing population and changes in the age distribution, however, age-adjusted mortality rates also increased, especially in females and older age groups.

Conflict of interest None.
Funding None.

11 VALIDATION OF THE FAST-ED SCORE FOR PREHOSPITAL IDENTIFICATION OF STROKE PATIENTS WITH LARGE-VESSEL OCCLUSION AND A COMPARISON WITH THE CLINICIAN'S JUDGMENT

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Background Endovascular thrombectomy (EVT) is a highly effective treatment for acute ischemic stroke patients with large-vessel occlusion (LVO). However, few comprehensive stroke centers are capable of providing EVT 24/7 and their geographical position is not necessarily ideal. We aimed to validate FAST-ED scale as a tool for LVO identification and